```
                  E KWIATKOWSKI MAREK/AU 25
L1             49 S (E3) AND 1800<=PY<=1997
                  E NILSSON MAT?/AU 25
L2             55 S (E4 OR E5 OR E6 OR E7 OR E8 OR E9 OR E10 OR E11 OR E12) AND 1
                  E LANDEGREN ULF/AU 25
L3             82 S (E3 OR E4) AND 1800<=PY<=1997
L4            167 S L1 OR L2 OR L3
L5         112825 S SOLID PHASE
L6          85016 S OLIGONUCLEOTIDE
L7           2439 S L5 AND L6
                  E SOLID PHASE SYNTHESIS+ALL/CT
L8        4018625 S (SOLID PHASE SYNTHESIS OR "REACTION" OR "SOLID PHASE SYNTHESI
                  E OLIGONUCLEOTIDES+ALL/CT
L9         587073 S (OLIGONUCLEOTIDES OR "CHEMICAL COMPOUNDS" OR "ORGANIC COMPOUN
L10        191465 S L9 AND L8
L11            13 S L10 AND L4
L12           116 S DISILOXY?
L13         10232 S ?SILOXY
L14         10270 S L12 OR L13
L15           584 S L14 AND L10
L16           390 S L15 AND 1800<=PY<=1997
L17            16 S ?SILOXY LINK?
L18             1 S L17 AND L16
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=> fil caplus
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                             ENTRY    SESSION
FULL ESTIMATED COST                                           0.21       0.21

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=> E KWIATKOWSKI MAREK/AU 25
E1             2      KWIATKOWSKI MACIEJ K/AU
E2             1      KWIATKOWSKI MACIEJ KRZYSZTOF/AU
E3            66 --> KWIATKOWSKI MAREK/AU
E4             1      KWIATKOWSKI MARGRET B/AU
E5            60      KWIATKOWSKI MARIAN/AU
E6             1      KWIATKOWSKI MARIAN J/AU
E7             4      KWIATKOWSKI MARIOLA/AU
E8             1      KWIATKOWSKI MARIOLA J/AU
E9             9      KWIATKOWSKI MIECZYSLAW/AU
E10            4      KWIATKOWSKI MIROSLAW/AU
E11            1      KWIATKOWSKI NICHOLAS/AU
E12            1      KWIATKOWSKI NICHOLAS PAUL/AU
E13           17      KWIATKOWSKI P/AU
E14            2      KWIATKOWSKI P A/AU
E15            2      KWIATKOWSKI P L/AU
E16            1      KWIATKOWSKI PATRICIA/AU
E17            8      KWIATKOWSKI PATRICIA L/AU
E18            1      KWIATKOWSKI PATRICIA LYNN/AU
E19           13      KWIATKOWSKI PAWEL/AU
E20            1      KWIATKOWSKI PAWEL A/AU
E21           21      KWIATKOWSKI PIOTR/AU
E22            5      KWIATKOWSKI R/AU
E23            8      KWIATKOWSKI R E/AU
E24            1      KWIATKOWSKI RAFAL/AU
E25            4      KWIATKOWSKI REGINA/AU

=> S (E3) AND 1800<=PY<=1997
              66 "KWIATKOWSKI MAREK"/AU
        18369429 1800<=PY<=1997
L1            49 ("KWIATKOWSKI MAREK"/AU) AND 1800<=PY<=1997

=> E NILSSON MAT?/AU 25
E1             1      NILSSON MARTINA/AU
```

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E2             4      NILSSON MARY E/AU
E3             0 --> NILSSON MAT?/AU
E4            10      NILSSON MATHIAS/AU
E5             5      NILSSON MATHS/AU
E6           101      NILSSON MATS/AU
E7             2      NILSSON MATS B/AU
E8             1      NILSSON MATS BO JOHAN/AU
E9             1      NILSSON MATS GUSTAV/AU
E10            3      NILSSON MATS O/AU
E11            1      NILSSON MATS OLA/AU
E12            3      NILSSON MATS T/AU
E13           13      NILSSON MATTIAS/AU
E14           14      NILSSON MAUD/AU
E15            1      NILSSON MELANIE/AU
E16           12      NILSSON MELANIE R/AU
E17            1      NILSSON MELANIE ROSE/AU
E18            2      NILSSON MELLBIN M/AU
E19            2      NILSSON MIA/AU
E20           37      NILSSON MICHAEL/AU
E21            1      NILSSON MICHAELA/AU
E22           68      NILSSON MIKAEL/AU
E23            3      NILSSON MIKAEL T I/AU
E24           10      NILSSON MONICA/AU
E25            1      NILSSON MONIKA/AU

=> S (E4 OR E5 OR E6 OR E7 OR E8 OR E9 OR E10 OR E11 OR E12) AND 1800<=PY<=1997
              10 "NILSSON MATHIAS"/AU
               5 "NILSSON MATHS"/AU
             101 "NILSSON MATS"/AU
               2 "NILSSON MATS B"/AU
               1 "NILSSON MATS BO JOHAN"/AU
               1 "NILSSON MATS GUSTAV"/AU
               3 "NILSSON MATS O"/AU
               1 "NILSSON MATS OLA"/AU
               3 "NILSSON MATS T"/AU
        18369429 1800<=PY<=1997
L2            55 ("NILSSON MATHIAS"/AU OR "NILSSON MATHS"/AU OR "NILSSON MATS"/AU OR "NILSSON
MATS B"/AU OR "NILSSON MATS BO JOHAN"/AU OR "NILSSON MATS GUSTAV"/AU OR "NILSSON MATS O"/AU
OR "NILSSON MATS OLA"/AU OR "NILSSON MATS T"/AU) AND 1800<=PY<=19
                 97

=> E LANDEGREN ULF/AU 25
E1             1      LANDEGREN J/AU
E2             5      LANDEGREN U/AU
E3           134 --> LANDEGREN ULF/AU
E4             4      LANDEGREN ULF D/AU
E5             1      LANDEGREN W/AU
E6             1      LANDEGREN WANJER/AU
E7             1      LANDEIRA A CRUZ/AU
E8             1      LANDEIRA FERNANDEZ A M/AU
E9             7      LANDEIRA FERNANDEZ ANA M/AU
E10            3      LANDEIRA FERNANDEZ ANA MARIA/AU
E11            6      LANDEIRA FERNANDEZ J/AU
E12            6      LANDEIRA FERNANDEZ JESUS/AU
E13            1      LANDEIRA G/AU
E14            2      LANDEIRA GRACIELA/AU
E15            1      LANDEIRA J M VILLAR/AU
E16            1      LANDEIRA JUAN M VILLAR/AU
E17            1      LANDEIRA M J/AU
E18            1      LANDEIRA PEDRO/AU
E19            1      LANDEIRO CLARA/AU
E20            5      LANDEK D/AU
E21            5      LANDEK DARKO/AU
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E22           1     LANDEK DON/AU
E23           1     LANDEK GORAN/AU
E24           1     LANDEK IVANA OZIMEC/AU
E25           2     LANDEK M A/AU

=> S (E3 OR E4) AND 1800<=PY<=1997
           134 "LANDEGREN ULF"/AU
             4 "LANDEGREN ULF D"/AU
      18369429 1800<=PY<=1997
L3          82 ("LANDEGREN ULF"/AU OR "LANDEGREN ULF D"/AU) AND 1800<=PY<=1997

=> s l1 or l2 or l3
L4         167 L1 OR L2 OR L3

=> s solid phase
       1051581 SOLID
        288527 SOLIDS
       1264373 SOLID
                 (SOLID OR SOLIDS)
       1729959 PHASE
        360536 PHASES
       1881638 PHASE
                 (PHASE OR PHASES)
L5      112825 SOLID PHASE
                 (SOLID(W)PHASE)

=> s oligonucleotide
         55125 OLIGONUCLEOTIDE
         51771 OLIGONUCLEOTIDES
L6       85016 OLIGONUCLEOTIDE
                 (OLIGONUCLEOTIDE OR OLIGONUCLEOTIDES)

=> s l5 and l6
L7        2439 L5 AND L6

=> s (solid phase synthesis OR "Reaction" OR "Solid phase synthesis" OR "Solid support
synthesis" OR "Solid-phase reaction" OR "Solid-phase synthesis" OR "Linking agents" OR
"N-(9-Fluorenylmethoxycarbonyl)-L-leucine")
       1051581 SOLID
        288527 SOLIDS
       1264373 SOLID
                 (SOLID OR SOLIDS)
       1729959 PHASE
        360536 PHASES
       1881638 PHASE
                 (PHASE OR PHASES)
       1288495 SYNTHESIS
             4 SYNTHESISES
         68571 SYNTHESES
             1 SYNTHESESES
       1326942 SYNTHESIS
                 (SYNTHESIS OR SYNTHESISES OR SYNTHESES OR SYNTHESESES)
         14018 SOLID PHASE SYNTHESIS
                 (SOLID(W)PHASE(W)SYNTHESIS)
       2991017 "REACTION"
       2157536 "REACTIONS"
       4010404 "REACTION"
                 ("REACTION" OR "REACTIONS")
       1051581 "SOLID"
        288527 "SOLIDS"
       1264373 "SOLID"
                 ("SOLID" OR "SOLIDS")
       1729959 "PHASE"
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         360536 "PHASES"
        1881638 "PHASE"
                  ("PHASE" OR "PHASES")
        1288495 "SYNTHESIS"
              4 "SYNTHESISES"
          68571 "SYNTHESES"
              1 "SYNTHESESES"
        1326942 "SYNTHESIS"
                  ("SYNTHESIS" OR "SYNTHESISES" OR "SYNTHESES" OR "SYNTHESESES")
          14018 "SOLID PHASE SYNTHESIS"
                  ("SOLID"(W)"PHASE"(W)"SYNTHESIS")
        1051581 "SOLID"
         288527 "SOLIDS"
        1264373 "SOLID"
                  ("SOLID" OR "SOLIDS")
         471759 "SUPPORT"
         131879 "SUPPORTS"
         560460 "SUPPORT"
                  ("SUPPORT" OR "SUPPORTS")
        1288495 "SYNTHESIS"
              4 "SYNTHESISES"
          68571 "SYNTHESES"
              1 "SYNTHESESES"
        1326942 "SYNTHESIS"
                  ("SYNTHESIS" OR "SYNTHESISES" OR "SYNTHESES" OR "SYNTHESESES")
            116 "SOLID SUPPORT SYNTHESIS"
                  ("SOLID"(W)"SUPPORT"(W)"SYNTHESIS")
        1051581 "SOLID"
         288527 "SOLIDS"
        1264373 "SOLID"
                  ("SOLID" OR "SOLIDS")
        1729959 "PHASE"
         360536 "PHASES"
        1881638 "PHASE"
                  ("PHASE" OR "PHASES")
        2991017 "REACTION"
        2157536 "REACTIONS"
        4010404 "REACTION"
                  ("REACTION" OR "REACTIONS")
           3161 "SOLID-PHASE REACTION"
                  ("SOLID"(W)"PHASE"(W)"REACTION")
        1051581 "SOLID"
         288527 "SOLIDS"
        1264373 "SOLID"
                  ("SOLID" OR "SOLIDS")
        1729959 "PHASE"
         360536 "PHASES"
        1881638 "PHASE"
                  ("PHASE" OR "PHASES")
        1288495 "SYNTHESIS"
              4 "SYNTHESISES"
          68571 "SYNTHESES"
              1 "SYNTHESESES"
        1326942 "SYNTHESIS"
                  ("SYNTHESIS" OR "SYNTHESISES" OR "SYNTHESES" OR "SYNTHESESES")
          14018 "SOLID-PHASE SYNTHESIS"
                  ("SOLID"(W)"PHASE"(W)"SYNTHESIS")
          44695 "LINKING"
            525 "LINKINGS"
          45103 "LINKING"
                  ("LINKING" OR "LINKINGS")
        1194852 "AGENTS"
              7 "AGENTSES"
```

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       1194856 "AGENTS"
                 ("AGENTS" OR "AGENTSES")
          2670 "LINKING AGENTS"
                 ("LINKING"(W)"AGENTS")
       2992457 "N"
       1884497 "9"
          2092 "FLUORENYLMETHOXYCARBONYL"
       1533070 "L"
         91372 "LEUCINE"
           648 "LEUCINES"
         91648 "LEUCINE"
                 ("LEUCINE" OR "LEUCINES")
            22 "N-(9-FLUORENYLMETHOXYCARBONYL)-L-LEUCINE"
                 ("N"(W)"9"(W)"FLUORENYLMETHOXYCARBONYL"(W)"L"(W)"LEUCINE")
L8     4018625 (SOLID PHASE SYNTHESIS OR "REACTION" OR "SOLID PHASE SYNTHESIS"
                OR "SOLID SUPPORT SYNTHESIS" OR "SOLID-PHASE REACTION" OR "SOLID
               -PHASE SYNTHESIS" OR "LINKING AGENTS" OR "N-(9-FLUORENYLMETHOXYCA
               RBONYL)-L-LEUCINE")

=> s (oligonucleotides OR "Chemical compounds" OR "Organic compounds" OR "Carbonyl compounds
(organic)" OR "Esters" OR "Chemical compounds" OR "Phosphorothioate
oligodeoxyribonucleotides" OR "Phosphorothioate oligonucleotides" OR "Phosphorothioate
oligodeoxyribonucleotides" OR "Aptamers")
         51771 OLIGONUCLEOTIDES
        910580 "CHEMICAL"
         51329 "CHEMICALS"
        954113 "CHEMICAL"
                 ("CHEMICAL" OR "CHEMICALS")
       1586154 "CHEM"
         75577 "CHEMS"
       1628780 "CHEM"
                 ("CHEM" OR "CHEMS")
       2255066 "CHEMICAL"
                 ("CHEMICAL" OR "CHEM")
        854769 "COMPOUNDS"
             4 "COMPOUNDSES"
        854772 "COMPOUNDS"
                 ("COMPOUNDS" OR "COMPOUNDSES")
         14201 "CHEMICAL COMPOUNDS"
                 ("CHEMICAL"(W)"COMPOUNDS")
        371915 "ORGANIC"
          3829 "ORGANICS"
        374388 "ORGANIC"
                 ("ORGANIC" OR "ORGANICS")
        996132 "ORG"
         15503 "ORGS"
       1001741 "ORG"
                 ("ORG" OR "ORGS")
       1105396 "ORGANIC"
                 ("ORGANIC" OR "ORG")
        854769 "COMPOUNDS"
             4 "COMPOUNDSES"
        854772 "COMPOUNDS"
                 ("COMPOUNDS" OR "COMPOUNDSES")
         81534 "ORGANIC COMPOUNDS"
                 ("ORGANIC"(W)"COMPOUNDS")
        172140 "CARBONYL"
         27481 "CARBONYLS"
        180340 "CARBONYL"
                 ("CARBONYL" OR "CARBONYLS")
        854769 "COMPOUNDS"
             4 "COMPOUNDSES"
        854772 "COMPOUNDS"
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                ("COMPOUNDS" OR "COMPOUNDSES")
       371915 "ORGANIC"
         3829 "ORGANICS"
       374388 "ORGANIC"
                ("ORGANIC" OR "ORGANICS")
       996132 "ORG"
        15503 "ORGS"
      1001741 "ORG"
                ("ORG" OR "ORGS")
      1105396 "ORGANIC"
                ("ORGANIC" OR "ORG")
         4085 "CARBONYL COMPOUNDS (ORGANIC)"
                ("CARBONYL"(W)"COMPOUNDS"(W)"ORGANIC")
       438576 "ESTERS"
            2 "ESTERSES"
       438577 "ESTERS"
                ("ESTERS" OR "ESTERSES")
       910580 "CHEMICAL"
        51329 "CHEMICALS"
       954113 "CHEMICAL"
                ("CHEMICAL" OR "CHEMICALS")
      1586154 "CHEM"
        75577 "CHEMS"
      1628780 "CHEM"
                ("CHEM" OR "CHEMS")
      2255066 "CHEMICAL"
                ("CHEMICAL" OR "CHEM")
       854769 "COMPOUNDS"
            4 "COMPOUNDSES"
       854772 "COMPOUNDS"
                ("COMPOUNDS" OR "COMPOUNDSES")
        14201 "CHEMICAL COMPOUNDS"
                ("CHEMICAL"(W)"COMPOUNDS")
        11211 "PHOSPHOROTHIOATE"
         2500 "PHOSPHOROTHIOATES"
        12027 "PHOSPHOROTHIOATE"
                ("PHOSPHOROTHIOATE" OR "PHOSPHOROTHIOATES")
         8707 "OLIGODEOXYRIBONUCLEOTIDES"
          971 "PHOSPHOROTHIOATE OLIGODEOXYRIBONUCLEOTIDES"
                ("PHOSPHOROTHIOATE"(W)"OLIGODEOXYRIBONUCLEOTIDES")
        11211 "PHOSPHOROTHIOATE"
         2500 "PHOSPHOROTHIOATES"
        12027 "PHOSPHOROTHIOATE"
                ("PHOSPHOROTHIOATE" OR "PHOSPHOROTHIOATES")
        51771 "OLIGONUCLEOTIDES"
         1874 "PHOSPHOROTHIOATE OLIGONUCLEOTIDES"
                ("PHOSPHOROTHIOATE"(W)"OLIGONUCLEOTIDES")
        11211 "PHOSPHOROTHIOATE"
         2500 "PHOSPHOROTHIOATES"
        12027 "PHOSPHOROTHIOATE"
                ("PHOSPHOROTHIOATE" OR "PHOSPHOROTHIOATES")
         8707 "OLIGODEOXYRIBONUCLEOTIDES"
          971 "PHOSPHOROTHIOATE OLIGODEOXYRIBONUCLEOTIDES"
                ("PHOSPHOROTHIOATE"(W)"OLIGODEOXYRIBONUCLEOTIDES")
         2502 "APTAMERS"
L9     587073 (OLIGONUCLEOTIDES OR "CHEMICAL COMPOUNDS" OR "ORGANIC COMPOUNDS"
                OR "CARBONYL COMPOUNDS (ORGANIC)" OR "ESTERS" OR "CHEMICAL
              COMPOUNDS" OR "PHOSPHOROTHIOATE OLIGODEOXYRIBONUCLEOTIDES" OR
              "PHOSPHOROTHIOATE OLIGONUCLEOTIDES" OR "PHOSPHOROTHIOATE OLIGODEO
              XYRIBONUCLEOTIDES" OR "APTAMERS")

=> d his
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     (FILE 'HOME' ENTERED AT 11:37:27 ON 08 JAN 2007)

     FILE 'CAPLUS' ENTERED AT 11:38:09 ON 08 JAN 2007
                E KWIATKOWSKI MAREK/AU 25
L1           49 S (E3) AND 1800<=PY<=1997
                E NILSSON MAT?/AU 25
L2           55 S (E4 OR E5 OR E6 OR E7 OR E8 OR E9 OR E10 OR E11 OR E12) AND 1
                E LANDEGREN ULF/AU 25
L3           82 S (E3 OR E4) AND 1800<=PY<=1997
L4          167 S L1 OR L2 OR L3
L5       112825 S SOLID PHASE
L6        85016 S OLIGONUCLEOTIDE
L7         2439 S L5 AND L6
                E SOLID PHASE SYNTHESIS+ALL/CT
L8      4018625 S (SOLID PHASE SYNTHESIS OR "REACTION" OR "SOLID PHASE SYNTHESI
                E OLIGONUCLEOTIDES+ALL/CT
L9       587073 S (OLIGONUCLEOTIDES OR "CHEMICAL COMPOUNDS" OR "ORGANIC COMPOUN

=> s l9 and l8
L10     191465 L9 AND L8

=> s l10 and l4
L11         13 L10 AND L4

=> d l11 ibib abs

L11  ANSWER 1 OF 13  CAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         1997:752199  CAPLUS
DOCUMENT NUMBER:          128:84835
TITLE:                    Seven-color time-resolved fluorescence hybridization
                          analysis of human papilloma virus types
AUTHOR(S):                Samiotaki, Martina; Kwiatkowski, Marek;
                          Ylitalo, Nathalie; Landegren, Ulf
CORPORATE SOURCE:         Department of Medical Genetics, The Beijer Laboratory,
                          Uppsala University, Uppsala, Swed.
SOURCE:                   Analytical Biochemistry (1997), 253(2),
                          156-161
                          CODEN: ANBCA2; ISSN: 0003-2697
PUBLISHER:                Academic Press
DOCUMENT TYPE:            Journal
LANGUAGE:                 English
AB   Identification of human papilloma virus (HPV) types is important in order
     to determine the risk of cervical carcinoma in women.  This requires a
     technique to probe individual samples for multiple virus specificities.
     Here we describe simultaneous multicolor anal. of amplification products
     for any of seven amplified HPV types 16, 18, 31, 33, 35, 39, and 45,
     associated with cancer of the cervix.  A seminested polymerase chain
     reaction was performed in a single tube using a biotinylated inner
     primer.  Sets of amplification products, immobilized on a 96-pronged
     manifold solid support, were rendered single stranded and probed with a
     mix of seven type-specific, differentially labeled
     oligonucleotides.  These probes contained 10 or 20 lanthanide
     chelates at the 5' ends with seven distinct combinations of europium,
     terbium, and samarium ions.  The seven viral strains were correctly
     identified by time-resolved fluorescence measurement of the specifically
     hybridized probes.  Using this assay format, simultaneous detection of any
     of seven or even more target variants is possible.
REFERENCE COUNT:          23    THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS
                                RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT


=> d l11 ibib abs 2-11
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L11  ANSWER 2 OF 13  CAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         1997:141051  CAPLUS
DOCUMENT NUMBER:          126:141769
TITLE:                    Immunoassay and kit with two reagents that are
                          cross-linked if they adhere to an analyte
INVENTOR(S):              Landegren, Ulf
PATENT ASSIGNEE(S):       Landegren, Ulf, Swed.
SOURCE:                   PCT Int. Appl., 12 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.       DATE
     ---------------     ----   --------    -------------------   --------
     WO 9700446           A1    19970103    WO 1996-SE779         19960614 <--
         W:  AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE,
             ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT,
             LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,
             SG, SI
         RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
             IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN
     SE 9502196           A     19961217    SE 1995-2196          19950616 <--
     SE 504798            C2    19970428
     CA 2224674           A1    19970103    CA 1996-2224674       19960614 <--
     AU 9661439           A     19970115    AU 1996-61439         19960614 <--
     AU 702125            B2    19990211
     EP 832431            A1    19980401    EP 1996-918976        19960614
     EP 832431            B1    20010816
         R:  CH, DE, FR, GB, IT, LI, SE
     JP 11508040          T     19990713    JP 1996-502991        19960614
     US 6878515           B1    20050412    US 1997-981310        19971216
     US 2005233351        A1    20051020    US 2004-11438         20041215
PRIORITY APPLN. INFO.:                      SE 1995-2196       A  19950616
                                            WO 1996-SE779      W  19960614
                                            US 1997-981310     A1 19971216
AB   The present invention relates to an immunol. test kit and immunoassay
     using a first immobilized antibody having affinity for a specific antigen.
     The invention is characterized by a second and third antibody being
     specific for different determinants of the antigen and modified with
     cross-linkable oligonucleotides.  For detection, the
     oligonucleotides are amplified, whereby only such
     oligonucleotides will be amplified which have been cross-linked to
     each other.  In this way unspecific background is avoided and detection is
     possible down to single mols.

L11  ANSWER 3 OF 13  CAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         1997:47716  CAPLUS
DOCUMENT NUMBER:          126:70852
TITLE:                    Optical waveguide device for DNA hybridization
                          analysis
AUTHOR(S):                Gordon, Julian; Hoijer, Joanell V.; Hsieh, Wang-Ting;
                          Jou, Cynthia; Stimpson, Don I.
CORPORATE SOURCE:         Abbott Laboratories, Abbott Park, IL, 60064, USA
SOURCE:                   Laboratory Protocols for Mutation Detection (
                          1996), 164-168.  Editor(s): Landegren,
                          Ulf.  Oxford University Press: Oxford, UK.
                          CODEN: 63WEAF
DOCUMENT TYPE:            Conference
LANGUAGE:                 English
AB   An optical waveguide device is described for direct visualization of DNA
     hybridization and melting off.  The principle is the use of a microscope
```

slide as a support for the oligonucleotide probes and as a waveguide. Non-coherent white light is injected into the slide end-on and is transmitted through by repeated total internal reflection from the surfaces. An evanescent wave is generated in an outer layer of the slide of approx. one-half the wavelength of the light source. Hybridization is detected using colloidal selenium of .apprx.0.2 µm diameter as a label. When the colloidal selenium is within the evanescent wave, it is illuminated and scatters light strongly. Beyond this boundary layer the colloid actually absorbs any stray scattered light. Extremely high concns. of label are thus advantageous and also serve to drive the forward direction of the binding reaction. The DNA to be hybridized is either biotinylated by incorporation of biotinylated nucleotides during synthesis, or the PCR products are generated with biotinylated oligonucleotides as primers. Together with a thermostatically controlled heating plate, this device has been shown to be capable of monitoring specific hybridization by generating melting curves within a few minutes.

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L11  ANSWER 4 OF 13  CAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         1997:47715  CAPLUS
DOCUMENT NUMBER:          126:85238
TITLE:                    Oligonucleotide arrays for scanning nucleic acid
                          sequences
AUTHOR(S):                Southern, Edwin; Maskos, Uwe; Case-Green, Stephen;
                          Johnson, Martin
CORPORATE SOURCE:         Dept Biochemistry, University Oxford, Oxford, OX1 3QU,
                          UK
SOURCE:                   Laboratory Protocols for Mutation Detection (
                          1996), 158-163. Editor(s): Landegren,
                          Ulf. Oxford University Press: Oxford, UK.
                          CODEN: 63WEAF
DOCUMENT TYPE:            Conference
LANGUAGE:                 English
```

AB Protocols for making oligonucleotide arrays and hybridization reactions for scanning nucleic acid sequences is presented.

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L11  ANSWER 5 OF 13  CAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         1997:47704  CAPLUS
DOCUMENT NUMBER:          126:70848
TITLE:                    Multiplex solid-phase fluorescent primer extension
AUTHOR(S):                Shumaker, John M.; Metspalu, Andres; Caskey, C. Thomas
CORPORATE SOURCE:         Dept Molecular and Human Genetics, Baylor College
                          Medicine, Houston, TX, 77030, USA
SOURCE:                   Laboratory Protocols for Mutation Detection (
                          1996), 93-95. Editor(s): Landegren,
                          Ulf. Oxford University Press: Oxford, UK.
                          CODEN: 63WEAF
DOCUMENT TYPE:            Conference
LANGUAGE:                 English
```

AB Solid-phase primer extension is a mutation anal. and comparative sequencing method that uses allele-specific oligonucleotides for primer extension by T7 DNA polymerase to scan simultaneously for several previously known mutations in genes of interest. In this method, a biotinylated PCR amplification is performed of the regions of interest, followed by isolation and purification of single-stranded template via magnetic separation PCR primers can be optimized for multiplex amplification. Individual extension primers are designed to vary in length and anneal immediately upstream of each potential mutation site. A fluorescent ddNTP addition is performed using T7 DNA polymerase to distinguish between the mutant and wild type sequence. The products are purified from unincorporated ddNTPs, eluted with formamide, and analyzed on an automated fluorescent DNA sequencer. This method provides a parallel anal. format since oligonucleotide length is used as a tag for the site of the mutation

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     on the DNA sequence, and the color of the peak in the chromatogram
     identifies the nucleotide at the potential site of mutation.

L11  ANSWER 6 OF 13  CAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:        1997:6415  CAPLUS
DOCUMENT NUMBER:         126:131741
TITLE:                   Synthesis of full-length oligonucleotides:
                         cleavage of apurinic molecules on a novel support
AUTHOR(S):               Kwiatkowski, Marek; Nilsson, Mats;
                         Landegren, Ulf
CORPORATE SOURCE:        Beijer Lab., Dep. Med. Genetics, Uppsala Univ.,
                         Uppsala, S-751 23, Swed.
SOURCE:                  Nucleic Acids Research (1996), 24(23),
                         4632-4638
                         CODEN: NARHAD; ISSN: 0305-1048
PUBLISHER:               Oxford University Press
DOCUMENT TYPE:           Journal
LANGUAGE:                English
OTHER SOURCE(S):         CASREACT 126:131741
AB   The synthesis of oligodeoxynucleotides is marred by several problems that
     contribute to the formation of defective mols.  This in turn seriously
     limits the usefulness of such reagents in DNA diagnostics, mol. cloning,
     DNA structural anal. and in antisense therapy.  In particular,
     depurination reactions during the cyclical steps of synthesis
     lead to strand scission during cleavage of the completed mols. from the
     support.  Here we present a remedy to this problem: a novel disiloxyl
     linkage that connects oligonucleotides to the support withstands
     reaction conditions that allow the removal of the 5' parts of any
     depurinated mols.  This ensures that all mols. that preserve the 5'
     protecting group when cleaved from the support will have both correct 3'-
     and 5' ends.  We demonstrate the application of the support for synthesis
     of padlock probe mols.
REFERENCE COUNT:         24    THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11  ANSWER 7 OF 13  CAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:        1996:91921  CAPLUS
DOCUMENT NUMBER:         124:108924
TITLE:                   Transfer of nucleic acid species at predetermined
                         concentration levels
INVENTOR(S):             Asp, Allan; Carstenius, Peder; Landegren, Ulf
PATENT ASSIGNEE(S):      Pharmacia Biotech AB, Swed.
SOURCE:                  PCT Int. Appl., 19 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:           Patent
LANGUAGE:                English
FAMILY ACC. NUM. COUNT:  1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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     WO 9530773           A1    19951116    WO 1995-SE492          19950505 <--
         W:  JP, US
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
     EP 758405            A1    19970219    EP 1995-918818         19950505 <--
     EP 758405            B1    20010718
         R:  CH, DE, FR, GB, IT, NL, SE
     JP 10500290          T     19980113    JP 1995-528889         19950505
     US 5759784           A     19980602    US 1996-737006         19961031
     CA 2189627           A1    19980505    CA 1996-2189627        19961105
PRIORITY APPLN. INFO.:                      SE 1994-1594        A  19940506
                                            WO 1995-SE492       W  19950505
AB   A method of dosaging a nucleic species comprises contacting a solid phase
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member or members, each member having a predetd. capacity of binding said nucleic acid species, with a sample containing the nucleic acid species to bind the nucleic acid species thereto, and then releasing the bound nucleic acid species into a desired processing or anal. means. Thus, a predetd. amount of avidin is conjugated to NHS-activated Sepharose HP particles, which are then attached to a multipronged polystyrene support. Testing of the binding capacity of the avidin-coated support by means of a 32P-labeled oligonucleotide, 5'-modified with biotin, indicated that each prong of the support could bind in the order of 20 pmol of biotinylated oligonucleotide. Residual levels of biotinylated primers had no effect on the fraction of PCR product to bind to the Sepharose particles.

L11 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:597003 CAPLUS
DOCUMENT NUMBER: 121:197003
TITLE: Solid-phase synthesis of chelate-labeled oligonucleotides: application in triple-color ligase-mediated gene analysis
AUTHOR(S): Kwiatkowski, Marek; Samiotaki, Martina; Lamminmaeki, Urpo; Mukkala, Veli-Matti; Landegren, Ulf
CORPORATE SOURCE: Dep. Med. Genetics, Beijer Lab., Uppsala, S-75123, Swed.
SOURCE: Nucleic Acids Research (1994), 22(13), 2604-11
CODEN: NARHAD; ISSN: 0305-1048
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Oligonucleotides labeled with detectable groups are essential tools in gene detection. The authors describe here the synthesis of pyrimidine deoxynucleotide-building blocks, modified at their C-5 position with a protected form of a strongly chelating agent. These reagents can be used to introduce multiple metal ions into oligodeoxynucleotides during standard oligonucleotide synthesis. The chelating functions form strongly fluorescent complexes with europium ions, characterized by a wide separation between the excitation and emission spectra. Moreover, the long decay time of the fluorescence permits sensitive time-resolved fluorescence measurements. The chelates also have the stability required to function in triple-color assays involving europium, samarium, and terbium ions. The authors demonstrate the application of these reagents for ligase-based gene anal. reactions.

L11 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:316842 CAPLUS
DOCUMENT NUMBER: 120:316842
TITLE: Europium-Labeled Oligonucleotide Hybridization Probes: Preparation and Properties
AUTHOR(S): Dahlen, Patrik; Liukkonen, Liisa; Kwiatkowski, Marek; Hurskainen, Pertti; Iitia, Antti; Siitari, Harri; Ylikoski, Jyrki; Mukkala, Veli-Matti; Lovgren, Timo
CORPORATE SOURCE: Wallac Oy, Turku, FIN-20101, Finland
SOURCE: Bioconjugate Chemistry (1994), 5(3), 268-72
CODEN: BCCHES; ISSN: 1043-1802
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A chemical method for labeling of oligonucleotide probes with europium chelates is presented. A modified deoxycytidine phosphoramidite is used to introduce multiple reactive amino groups to the oligonucleotide during the synthesis phase. Upon deprotection and purification of the modified oligonucleotide, an isothiocyanate derivative of a stable Eu chelate is reacted with the primary amino groups. The labeling technol. enables the

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     coupling of a high number of Eu chelates to a single probe.  The melting
     temps. and hybridization efficiencies of the oligonucleotides
     are not significantly altered by the labeling process.  However,
     hybridization kinetics of the oligonucleotides are affected by
     the introduction of multiple modified deoxycytidine residues.  In a
     solid-phase hybridization assay, up to 107 target mols. can be detected.

L11  ANSWER 10 OF 13  CAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         1992:229117  CAPLUS
DOCUMENT NUMBER:          116:229117
TITLE:                    Automated gene detection using the oligonucleotide
                          ligation assay
AUTHOR(S):                Landegren, Ulf
CORPORATE SOURCE:         Dep. Med. Genet., Uppsala Biomed. Cent., Uppsala,
                          Swed.
SOURCE:                   Methods in Molecular Biology (Totowa, NJ, United
                          States) (1991), 9(Protoc. Hum. Mol. Genet.),
                          85-93
                          CODEN: MMBIED; ISSN: 1064-3745
DOCUMENT TYPE:            Journal
LANGUAGE:                 English
AB   This chapter describes a strategy under standardized conditions.
     Applications of the technique includes screening for mutant gene sequences
     and genetic linkage anal. The anal. may be performed manually or by a
     laboratory workstation resulting in a generally applicable automated gene anal.
     technique.  The authors have taken advantage of the standardized formats
     of 2 recently developed gene anal. techniques, the polymerase chain
     reaction (PCR) and the oligonucleotide ligation assay (OLA), by
     applying these together in a scheme for the anal. of DNA sequence
     variants.  The PCR technique permits the exponential accumulation of DNA
     segments defined by 2 flanking primer sequences.  With this technique even
     very limited tissue samples may be analyzed and DNA sequences may be
     detected in an enormous excess of irrelevant DNA.  In the OLA technique
     the enzymic joining of 2 synthetic oligonucleotide probes, hybridizing to
     a target strand in immediate juxtaposition, depends on the correct base
     pairing of the function region of the two oligonucleotides.
     Thus, sequence variants may be rapidly distinguished under standardized
     conditions.  The successful ligation can be visualized by retrieving 1 of
     the 2 oligonucleotides via an added biotin residue and assaying
     for the coimmobilization of the other oligonucleotide, labeling with a
     detectable group.  A hapten (digoxigenin) that can be monitored by
     enzyme-linked immune detection is used as a detectable group.  The
     combination of target amplification of PCR with sequence distinction using
     OLA results in a sensitive, robust automatable assay for the presence of
     DNA sequence variants.

L11  ANSWER 11 OF 13  CAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:         1992:167273  CAPLUS
DOCUMENT NUMBER:          116:167273
TITLE:                    Capture PCR:  efficient amplification of DNA fragments
                          adjacent to a known sequence in human and YAC DNA
AUTHOR(S):                Lagerstroem, Maria; Parik, Juri; Malmgren, Helena;
                          Stewart, Jason; Pettersson, Ulf; Landegren,
                          Ulf
CORPORATE SOURCE:         Uppsala Biomed. Cent., Uppsala Univ., Uppsala, S-751
                          23, Swed.
SOURCE:                   PCR Methods and Applications (1991), 1(2),
                          111-19
                          CODEN: PMAPES; ISSN: 1054-9803
DOCUMENT TYPE:            Journal
LANGUAGE:                 English
AB   A procedure, termed capture PCR (CPCR), was devised that permits the rapid
     isolation of DNA segments situated adjacent to a characterized nucleotide
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sequence. In this procedure, a DNA sample is restriction-digested and a linker, comprising 2 base-paired oligonucleotides, is added to the ends by ligation. Multiple extension reactions are performed using a biotinylated primer derived from the known sequence, permitting the subsequent isolation of extension products on a streptavidin-coated support. The enriched fragments are amplified exponentially using another specific oligonucleotide, hybridizing 3' to the biotinylated primer in combination with 1 of the linker oligonucleotides, now functioning as a PCR primer. The convenience of CPCR is greatly enhanced by using a novel streptavidin-coated manifold, which is constructed so that it projects into each individual well of a microtiter plate. The procedure permits the simultaneous isolation of fragments from large number of DNA samples and minimizes the risk of contamination between reactions. This method was applied to identify DNA sequences located downstream of known sequences in the human genome. The technique has also been used to identify end fragments of sequences cloned in a yeast artificial chromosome (VAC) vector. The reactions can be initiated directly from yeast colonies and provide access to DNA sequence information for these end fragments in a minimal number of steps. With the aid of the present technique, over 100 end fragments were isolated from YACs derived from the human X chromosome. Isolated end sequences have been used to order YAC clones into a contig.

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=> d his

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L1           49 S (E3) AND 1800<=PY<=1997
                E NILSSON MAT?/AU 25
L2           55 S (E4 OR E5 OR E6 OR E7 OR E8 OR E9 OR E10 OR E11 OR E12) AND 1
                E LANDEGREN ULF/AU 25
L3           82 S (E3 OR E4) AND 1800<=PY<=1997
L4          167 S L1 OR L2 OR L3
L5       112825 S SOLID PHASE
L6        85016 S OLIGONUCLEOTIDE
L7         2439 S L5 AND L6
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L8      4018625 S (SOLID PHASE SYNTHESIS OR "REACTION" OR "SOLID PHASE SYNTHESI
                E OLIGONUCLEOTIDES+ALL/CT
L9       587073 S (OLIGONUCLEOTIDES OR "CHEMICAL COMPOUNDS" OR "ORGANIC COMPOUN
L10      191465 S L9 AND L8
L11          13 S L10 AND L4

=> s disiloxy?
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=> s ?siloxy
L13       10232 ?SILOXY

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L18  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER:        1994:631270  CAPLUS
DOCUMENT NUMBER:         121:231270
TITLE:                   Preparation of siloxy-linked
                         oligonucleotide analogs
INVENTOR(S):             Walder, Joseph A.; Li, Zigun
PATENT ASSIGNEE(S):      Integrated DNA Technologies, Inc., USA
SOURCE:                  PCT Int. Appl., 52 pp.
                         CODEN: PIXXD2
DOCUMENT TYPE:           Patent
LANGUAGE:                English
FAMILY ACC. NUM. COUNT:  1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
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     WO 9406811           A1    19940331    WO 1993-US8980         19930922 <--
         W:  AU, CA, JP
         RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
     AU 9351629           A     19940412    AU 1993-51629          19930922 <--
PRIORITY APPLN. INFO.:                      US 1992-950384      A  19920923
                                            WO 1993-US8980      W  19930922
OTHER SOURCE(S):         MARPAT 121:231270
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